



"Houston T. Hawkins" <hthawkins@lanl.gov>@nis.lanl.gov on 06/26/2000
05:34:30 PM

Sent by: ddnis-all-request@nis.lanl.gov

To: nis-all@lanl.gov

CC:

Subject: Memo to Colleagues

Dear NIS Colleagues:

With the recent and current security problems, the Cerro Grande fire, and the threat of 100-year floods, this has been a difficult year for all of us. I know you share my sadness in seeing the blackened hills and burnt-out homes. I also know how you must feel in seeing our institution pilloried in the tabloid media, our leaders flogged in the public arena, and the Nation's nuclear weapons and nonproliferation programs swirling in the eddies of contemporary politics. Frankly, my first inclination was to withdraw from reality and cloister myself in the sanctuary of scientific work. At least in this work, deliberate processes based on facts and data derived from calibrated systems help solve problems. But, hiding is not a solution and, fortunately, we are not without remedies. The future is still in ours. It lies in our hearts because we believe in what we are doing, in our hands because we are not afraid of hard work, and in our heads because it is through deliberate thought that problems are best solved.

Of course, a critical part of the solution is to hold those heads up high. You can and should be proud of your accomplishments and the role played by Los Alamos in securing the peace for over 50 years while holding in check the tyranny that almost engulfed the world. Until the advent of nuclear weapons, Moscow had acquired an average of 35,000 square kilometers of territory -- an area equivalent to modern Holland -- every year for 150 consecutive years.* It was weapons developed here and in our sister laboratory that stopped that expansion and secured Western civilization. Thus isolated, the Moscow expansion first stagnated and then died. Now, the Russians and people of Eastern Europe who suffered most under that tyranny are slowly entering the world of freedom where their spirits too can soar. We all are part of this historic enterprise and I'll be damned if I will hang my head in shame.

But we cannot be content with the laurels of history; we still have equally important challenges before us. Countering the threat posed by the glut of nuclear materials in an increasingly fragmented and hostile world will require the full measure of our commitment and abilities. We have much more plutonium and enriched uranium to secure kilogram by kilogram before we can declare victory. We simply cannot wait until terrorists place a stolen or improvised nuclear device in the heart of one of our major cities. If, Heaven forbid, that terrorist threat does materialize, we must be poised to deal with even that possibility as well.

In this new unstable world, good security practices are all the more important and we all

must redouble our efforts to secure classified information. This requirement is even more demanding in an age where technology has made obsolete the security processes of the past. Ink and paper have been replaced by gigabytes and hard drives; locks have become passwords; and fences have become firewalls. Thus, sound security is not an end-state but a continuing journey through uncharted mine fields. Success in this journey requires diligence, attention to detail, alertness, formality, agility, and an environment that encourages self-reporting. Without the latter, we are apt to have excellent statistics and disastrous security. However, ultimately sound security reduces down to two aspects. Those two aspects are trust and individual accountability -- "trust" because the creators of secrets, who lock them up before leaving their offices, take the same information home in their heads and "individual accountability" because each of us is a steward of our assigned piece of the Nation's security and no system of security is stronger than its most fragile link.

Finally, we need to fully engage the strength that our relation to the University of California (UC) brings to the challenges we face. Certainly, the attractive benefit package that the UC provides is important for staff retention and recruitment. The same could be said for the indisputable reputation the UC has for excellence in science. But, the soul of the issue goes beyond those elements to a more fundamental strength. Possibly Cardinal John Henry Newman defined that fundamental strength best. "A university is a place where inquiry is pushed forward and discoveries verified and perfected, and rashness rendered innocuous, and error exposed, by the collision of mind with mind, and knowledge with knowledge." As a veteran of over three decades in the business of nuclear weapons, I have become increasingly appreciative of this approach to problem solving. It has created a classical dichotomy -- incredibly powerful weapons that are absolutely safe. Indeed, the approach demands that every aspect of a nuclear weapon's existence from concept to retirement be constantly characterized, evaluated, questioned and debated. This is the process envisioned by Cardinal Newman at its best. It is how we are trained to think and expected to act because there is no margin for error. It is why we hone our skills by defining the cosmos and physical world around us. Now as we move into a regime in which empirical testing of nuclear weapons will be replaced by scientific-based stewardship, it would be folly to silence the scientific debate on something as important as nuclear weapon control, safety and reliability.

Terry

* Richard Pipes, "Russia under the old Regime," Charles Scribner & Sons, New York

Houston T. (Terry) Hawkins, Director NIS
Nonproliferation & International Security Division/Programs
Los Alamos National Laboratory, Mail Stop F650
Los Alamos, New Mexico, USA 87545
Telephone 505-665-1259, FAX 505-665-4109
e-mail: hthawkins@lanl.gov
